

MONTHLY CONSTRUCTION REPORT TO FERC REPORT FOR APRIL 1 - MAY 15 2006

1) Progress of Work

Work on the Falls Creek Hydroelectric Project commenced on April 3, 2006. Major items of work this month included cutting all trees for road right of way, power-house and borrow pits, and construction of the base for approximately one mile of access road. Three barge deliveries mobilized equipment and supplies from Juneau to Gustavus.

2) Status of Construction

A public pre-construction meeting was held on March 27, 2006 at Gustavus City hall. The project manager (PM), Richard Levitt, introduced Steve Manchester – construction superintendent (CS), and Bob Christensen – Environmental Compliance Monitor (ECM) to the community of Gustavus. Mr. Levitt provided information on design, construction plans, timelines, and answered questions from the public about a variety of project related topics. Please see appendix 2 for a copy of meeting minutes.

Cutting of trees in the project area started on April 3, 2006 and finished April 29, 2006. This area included all access and service road right-of-way, areas of expected material sources (rock and gravel pits), the area of the powerhouse and intake and the penstock right-of –way.



Road pioneering

A chartered tug and barge made three trips from Juneau to Gustavus to mobilize equipment and materials for the project. The barge dates were March 19, March 30 and April 15. Equipment transported included D8 Dozer, D6 Dozer, Excavator 332, 4 cu yard loader, boom truck, trailer, lowboy, rock drill, and two rock trucks. Materials included culvert pipe and erosion and sediment control material.

Borrow pits were stripped and developed on private property at the start of the access road and approximately $\frac{3}{4}$ of a mile into the new road (Figure 1). The material in both sites consisted of rocky blue clay. Four to six feet of over burden on top of the material had to be stripped and stockpiled. The material was ripped with the D-8 dozer and loaded into the rock trucks using the excavator. The rocks in the clay were stream or glacier rounded varying in size from pebbles to five-foot diameter boulders. The material was predominantly clay. If the material got wet while being worked, it was liquid and useless. If deposited on the roadbed dry, it would set up hard and shed water. It could not be driven on while wet, however. For this reason, rain would shut down the road construction process. This is why the rocky blue clay road base will be topped by one foot of shot rock when the road reaches a road source approximately 1.4 miles from the start of the access road (See Pit 3 in Figure 1). Until then, we are limited to working on dry days.

Culverts have been placed where needed and erosion and sediment control measures have been taken where needed (Figure 2). This has included stream diversioning, silt fencing, sediment ponds, straw bales, etc.

3) Construction Difficulties

The difficulty in pioneering of the access road resulted in having to helicopter in the tree cutters for most of the cutting. The five cutters did the cutting on schedule and within budget. But since it became much too time consuming to hike in and out each day, a helicopter was used for accessing the work sites. This was an unexpected cost of \$10,000.00.

The road building difficulties arose from the lack of good quality road fill material. We expected to find rock at a depth of eight feet in the area of the start of the access road, but the rocky blue clay described above went to a depth of at least 25 feet, the maximum depth of our material pit. Extra time was spent trying to find good rock in the area of the pit, but there was none.

There is no other road building material source in the Gustavus area. The use of the rocky blue clay caused the construction to shut down for approximately 1½ week during April due to wet weather. While this did not add any additional labor cost, we are leasing the equipment by the month, and the cost is the same whether the equipment works or not.

Our construction superintendent has had experience working with the rocky blue clay building Forest Service logging roads in Southeast Alaska. He has been invaluable in mining this material and using it as a road base.

We plan to make up for past weather delays when we reach the known rock source and complete the road construction in August.

5) Critical Events and Dates

Road clearing and construction began on April 3rd, 2006. The base has been laid for approximately half of the access road at the date of this report. We expect to be building the intake service road by July or August and recommend that time period for a FERC site visit. We will update FERC with a more precise estimate of timing in the next report.

8) Sources of Major Construction Material

Two borrow sources have been used to date for road construction material. Pit #1 is located approximately 500 feet from the start of the access road on private property. Pit #2 is located approximately one mile from the start of the access road. It is expected to have the road constructed to Pit #3, 1400 feet further from Pit #2, by mid-May. At that time, we will be able to access good rock, and not have to use the rocky blue clay in Pit #1 and Pit #2.

The attached Figure 1 shows the location of these pits and the access road built to date.



Photo showing the character (dry) of the lodgment till material available in pit 1 and pit 2.

11) Photographs

Ten photo vantage points were established as work progressed throughout the project area. See Figure 1 for photo site locations and Appendix 1 for initial photos.

12) Erosion Control and Other Environmental Measures

The first phases of applying environmental compliance measures involved the final placement of the road and penstock right of way. Considerable fine scale adjustments were made while flagging the final alignment to reduce impacts to marbled murrelet habitat and reduce the likelihood of windthrow events. Approximately a dozen individual habitat trees were saved through fine-scale alignment changes and overall the highest quality forest covers were avoided altogether. A slight increase in affected wetlands may result from these adjustments but the ECM judged this potential trade-off to be within the scope of the environmental compliance plan.

Efforts were made to insure that right of way trees were felled prior to the beginning of murrelet and raptor nesting activities.

Impacts to murrelet habitat, bear habitat and other mammals that benefit from salmon availability are the greatest at the power-house site. The ECM met with the PM and CS on location prior to tree clearing operations to discuss possible alternatives and means to reduce impacts to habitat. An alternative power-house site was considered for reducing impacts to habitat but had to be abandoned because of not providing enough distance/ elevation change to maintain a safe and practical road grade.

Development of pit 1 and construction of the road base began shortly after right of way tree clearing commenced. The material provided by pit 1 (and pit 2) is a form of lodgment till comprised largely of blue clay, gravel, cobble and boulder. This material is particularly prone to the mobilization of silt during rain events and will need to be capped with layer of rock for stabilization. This material is also resulting in a larger than normal road prism base because it is highly compactible. The larger cut banks and back slopes will need to be covered by slope stabilization fabric and possibly hydro-seeded. Other areas will need topsoil dressing to increase the rate of local plant colonization.

After road base construction and culvert placement had occurred up to the location of pit 2 the weather became very wet. This mobilized sediment along the road bed and necessitated the construction of sediment fencing and settling ponds at each culvert and stream crossing (See Figure 2 for culvert locations). These



Sediment control measures.



Clearing at the power-house site.

measures, along with grade improvements along problematic low spots, were very effective at controlling sediment. Little sediment entered the two anadromous stream crossings encountered thus far (Homesteader creek). In several other locations the mobilized silt has penetrated bordering forest up to 30 feet from the road bed but it is believed that the moss and root mat is minimizing further spreading of this material.

Two small fuel spills (less than one gallon) were brought to the attention of the ECM. Both spills occurred while fueling the road construction machinery with diesel and were promptly cleaned up using fuel “diapers”. Both spills occurred in non-sensitive areas.

13) Other Items of Interest

In compliance with its Road Management Plan, we have placed a temporary 40 Ton bridge across Rink Creek. The temporary bridge completely spans the existing Rink Creek Bridge. It will be removed when it is no longer needed and the existing bridge will be used as usual.

Mobilization coincided with the middle of spring breakup, and Rink Creek Road was in deplorable condition. We spent \$9,000.00 maintaining the road during the period, and the residents seemed happy with the road condition. The maintenance included grading the road six times and adding dozens of truckloads of gravel to the road during that time.

The following sections are not yet applicable to the date of this report:

4) Contract Status

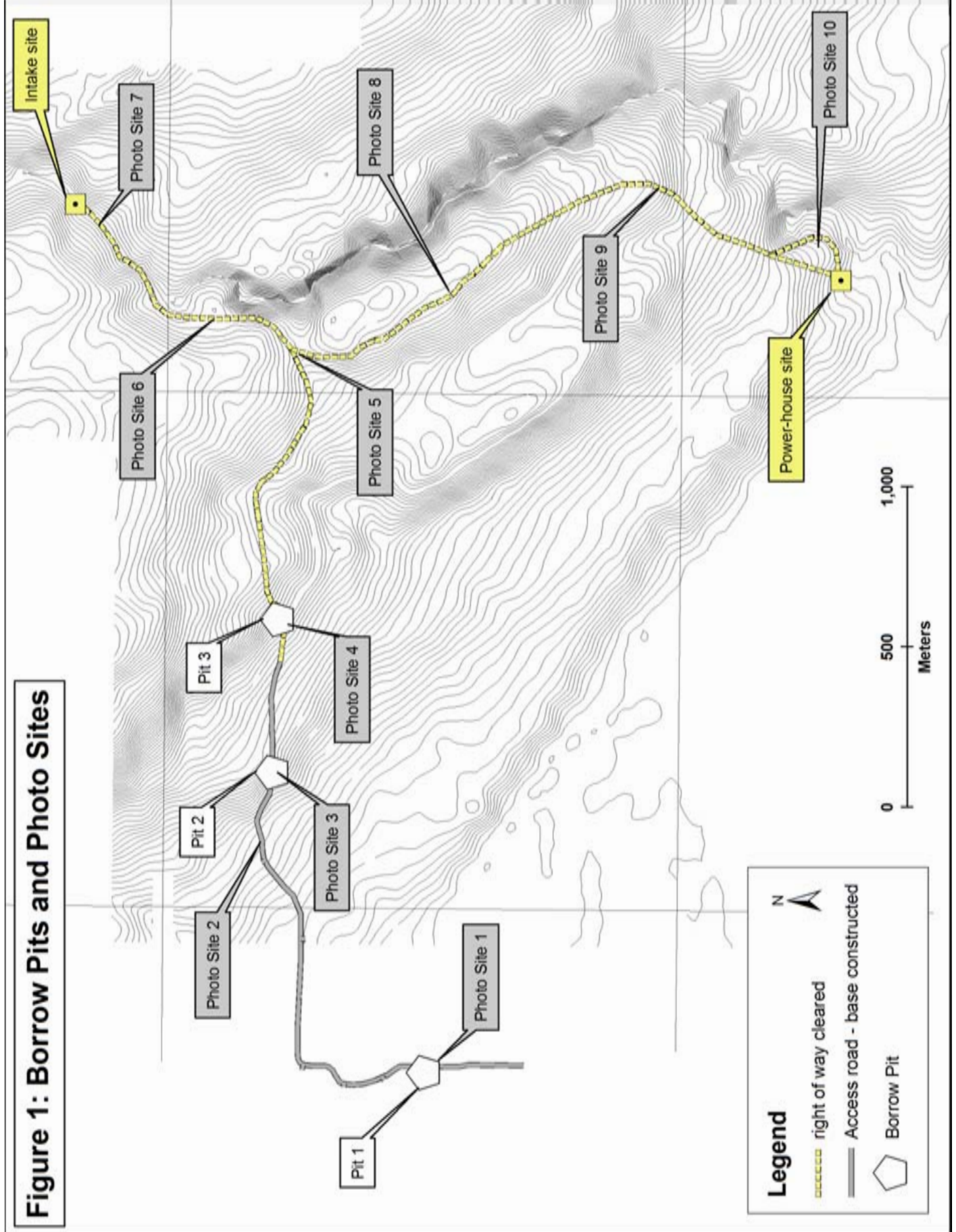
6) Reservoir Filling

7) Foundations

9) Materials Testing and Results

10) Instrumentation

Figure 1: Borrow Pits and Photo Sites



APPENDIX 1: INITIAL PHOTOS FROM VANTAGE POINTS



01._photo_site.jpg



01_photo_site.JPG



02_photo_site.JPG



03_photo_site.JPG



03.1_photo_site.JPG



04_photo_site.JPG

Falls Creek Surveys



N 53° 26.289' W 125° 35.408' 2050 ft 04/05/2006 1:29:07 PM

05_photo_site.jpg

Falls Creek Surveys - intake road



N 53° 26.664' W 125° 35.218' 570 ft 04/03/2006 9:26:43 AM

07_photo_site.jpg



06_photo_site.JPG



08_photo_site.JPG

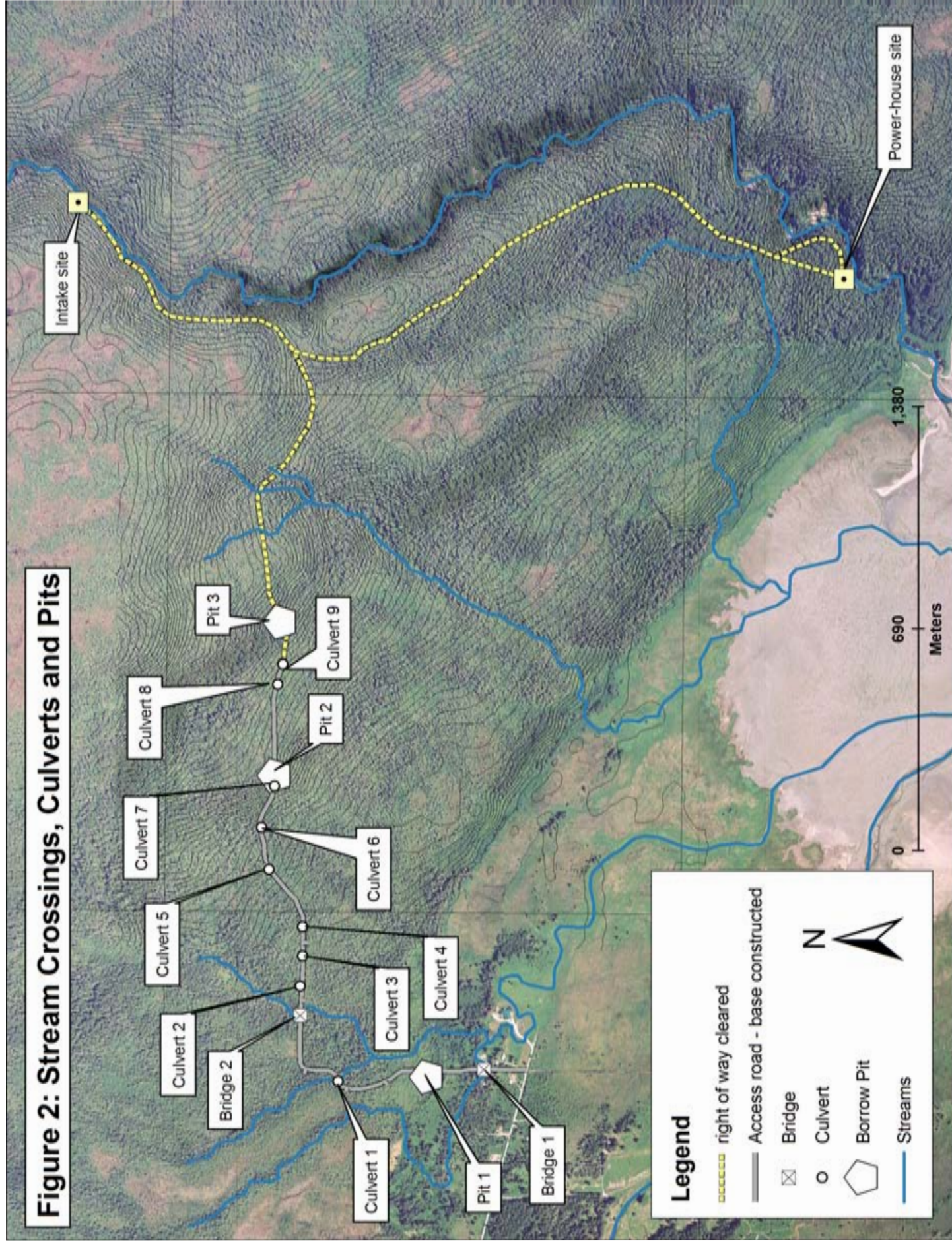


09_photo_site.JPG



10_photo_site.jpg

Figure 2: Stream Crossings, Culverts and Pits



**APPENDIX 2: ENVIRONMENTAL COMPLIANCE PLAN – PUBLIC MEETING MINUTES
MARCH 27, 2005 (MINUTES COMPILED BY THE ECM, BOB CHRISTENSEN)**

Meeting begins ~ 7:00pm with approximately 35 people showing up.

Dick Levitt (DL) – Opens the meeting by thanking folks for coming and giving an overview of the purpose of the meeting and the content to be covered – namely the construction period environmental compliance plan (ECP).

DL – Introduces Bob Christensen as the project Environmental Compliance Monitor (ECM) and Steve Manchester as the project manager.

DL – Describes context of the ECP as being one of 14 plans approved by FERC in acquisition of the license for the hydro project.

DL – Asks if anyone from the agencies or the Hoonah Indian Association are in attendance. Answer is no.

DL – Gives a brief overview of the construction details pertaining to the access and service roads, intake and powerhouse. Outlines the environmental compliance measures for each phase (e.g. wetlands, nesting bird, windthrow and sediment control protections).

DL – Outlines tentative scheduling for the primary phases of the project (access road, service road, impoundment, powerhouse, transmission line).

DL – Invites the public to contact him at his office if they have questions or concerns about environmental compliance issues, or other issues, associated with the construction of the project.

DL – Invites the gathering to ask questions.

Question: Steve Stellar – Asks about the condition of the rink creek bridge and its ability to support the construction activities – asks if the bridge will be replaced.

Answer: Steve Manchester (SM) – Hope to have a temporary bridge in place by April 1 or so.

Question: TJ Farrell – What is the Daily work schedule? Any dust control plan?

Answer: SM – Work will typically start at 7 am and continue until about 6pm. Blasting will likely occur in the later part of the day. No dust control plan is necessary.

Question: Justin Smith – What will happen to the timber cut during the development?

Answer: - DL & SM – Logs suitable for firewood will be hauled to a location near the community. No firewood cutting will be allowed on the project site. State logs suitable for export will be decked per their request and will probably be sold by them.

Question: TJ Farrel – Will phone line be ditched along road and transmission line? How big with the ditch be?

Answer: DL – Fiberoptic cable will be run between the powerhouse and intake structures. No phone line will be looped back to town. The ditch will be ~ 18” wide by 36” deep.

Question: Richard Sirsted – Will the cables be waterproof?

Answer: DL – Yes.

Question: Mike Atkins – What will happen to electric rates?

Answer: DL – If the project is funded entirely through grants then rates should decrease substantially.

Question: TJ Farrel – Asks for clarification on rates.

Answer: DL - There will be an entirely new rate structure.

A segway is adopted here and DL adds a few general details about the project (i.e. no hunting from the access and service roads but hunting and trapping will be allowed in the state land, total area of state land is 1050 acres, total area of project lands leased to DL is 200 acres, access road is 5/8s mile on private, 1.2 miles to the strip fen, 1.8 miles for service road).

Question: Richard Sirsted – How much power can you produce with the facility?

Answer: DL – 800KW.

Question: Justin Smith - Will slash be burned?

Answer: SM & DL - Some slash will be burned on private lands. No slash will be burned on State land. DL adds that non native seeding will not take place and that native flora from the site will be used to dress affected areas.

Question: Yanish – Will the park buy electricity from you? Will there be a parking lot on the state land for recreation opportunities?

Answer: DL – Maybe. It is complicated - the Park was not able to consider that an option before because of conflict of interest during licensing phase. Now that the license has been issued they may opt to buy electricity. The project has been designed to provide electricity for Gustavus, future growth of Gustavus, and the National Park. Gustavus should have first priority for power needs in all foreseeable scenarios. No parking lot on state land. Parking for recreation on the state land will be provided by the Bear Track Lodge. No motorized access will be allowed on the access and service roads. Trails will be constructed at a few spots along the access and service roads.

Question: Carolyn – How long have you been working on this project? What is the Park getting out of the deal?

Answer: DL – Project planning and design began in 1983. Initial phases were scoping in nature and were focused on assessing the likelihood of getting an act of congress to pull the lands out of the park. In 1998 an act of congress was passed that approved the land removal, at least temporarily for studies, from the Park. In 1999 the interdisciplinary studies were begun. Studies were completed in 2001 and the FERC license request was submitted. In 2004 FERC approved the license per the completion of the various plans, the ECP being one of 14 and under discussion this evening. The Park is getting about a thousand acres along the Chilkoot trail, Cenotaph island and a chunk of land suitable for wilderness.